



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/788,766 | 02/27/2004 | Kroum S. Stoev | K35R1851 | 8458 |

35219 7590 09/07/2006

WESTERN DIGITAL TECHNOLOGIES, INC.
ATTN: SANDRA GENUA
20511 LAKE FOREST DR.
E-118G
LAKE FOREST, CA 92630

EXAMINER

WATKO, JULIE ANNE

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2627

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/788,766

Applicant(s)

STOEV ET AL.

Examiner

Julie Anne Watko

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,10-15,17,18,23,25,26,28 and 35 is/are rejected.
- 7) ☒ Claim(s) 3,8,9,16,19-22,24,27 and 29-34 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/27/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Double Patenting

1. Applicant is advised that should claims 2-3 be found allowable, claims 15-16 will be objected to under 37 CFR 1.75 as being substantial duplicates thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12-13 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation “the second pedestal” in line 1. There is insufficient antecedent basis for this limitation in the claims.

Claim 13 recites the limitation “the second pedestal” in line 1. There is insufficient antecedent basis for this limitation in the claims.

Claim 17 recites the limitation “the conductive section is part of a coil that substantially encircles the backgap region.” Claim 17 depends from claim 15, which recites “the conductive section is part of a coil that substantially encircles the second pole layer.” It is unclear in what sense the conductive section can substantially encircle both the backgap and the second pole.

Art Unit: 2627

4. Regarding claims 12-13 and 17: In the absence of a reasonably definite interpretation of a claim, it is improper to rely on speculative assumptions regarding the meaning of a claim and then base a rejection under 35 U.S.C. 103 on these assumptions (*In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962)). See MPEP 2143.03. These claims will be treated on the merits at such time as they might become reasonably clear and definite.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 4-7, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki '954 (US Pat. No. 6583954 B1).

As recited in claim 1, Sasaki '954 shows a magnetic head (see Fig. 12A, for example) for writing information on a relatively-moving medium, the head having a leading end (lower end in Fig. 12A, for example), a trailing end (upper end in Fig. 12A) and a medium-facing surface (left

Art Unit: 2627

end in Fig. 12A), the head comprising: a first soft magnetic pole layer 9 disposed in the head adjacent to the medium-facing surface and extending substantially perpendicular to the medium-facing surface; a second soft magnetic pole layer 29 disposed closer than the first pole layer to the trailing end, the second pole layer magnetically coupled to the first pole layer in a backgap region (see 23) that is removed from the medium-facing surface; a soft magnetic pedestal 22 adjoining the second pole layer, the pedestal 22 disposed closer than the second pole layer 29 to the (left) medium-facing surface and 22 extending less than the second pole layer 29 extends (rightwardly) from the medium-facing surface, the pedestal 22 separated from the first pole layer by a nonferromagnetic gap 10; and a conductive section 27 that is disposed between and electrically isolated (see 28) from the first 9 and second 29 pole layers.

Sasaki '954, however, remains silent as to the specific relationships set forth in claim 1.

It is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization/ experimentation and thereby obtain various optimized relationships including those set forth in claim 1.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the magnetic head of Sasaki satisfy the relationships set forth in claim 1. The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the magnetic head of Sasaki satisfy the relationships set forth in claim 1 since it is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization /experimentation and thereby obtain various optimized relationships including those set forth in claim 1. Moreover, absent a showing of

Art Unit: 2627

criticality (i.e., unobvious or unexpected results), the relationships set forth in claim 1 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

As recited in claim 4, Sasaki '954 shows that the conductive section 27 is part of a coil that substantially encircles the backgap region (coil 29 has the same location as coils 12 and 14 in Fig. 8, wherein coils 12 and 14 are shown encircling the back gap).

As recited in claim 5, Sasaki '954 is silent regarding whether the conductive section is part of a coil that includes less than seven conductive sections disposed between and electrically isolated from the first and second pole layers.

There is no invention in changing the number of parts of a known apparatus. *Iron Grip Barbell Co. v. USA Sports Inc.*, 73 USPQ2d 1225 (CAFC 2004).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrive at the claimed number of conductive sections in the course of routine experimentation and optimization. The rationale is as follows: one of ordinary skill in the art would have been motivated to arrive at the claimed number of conductive sections in order to achieve a desired inductance, magnetic flux and head size, and to improve high frequency operation as is notoriously well known in the art.

As recited in claim 6, Sasaki '954 shows that the second pole layer 29 has a leading (lower) surface and a trailing (upper) surface, the trailing (upper) surface having a flat area (see shape of 29 in Fig. 12A) disposed approximately midway between the medium-facing (left) surface and the backgap region (right), the leading (lower) surface having a curved area disposed closest to the flat area.

As recited in claim 7, Sasaki '954 shows that the second pole layer 29 has a trailing (upper) surface that is disposed distal to the first pole layer, the trailing (upper) surface having a plurality of curved sections separated by a flat section (see shape of 29 in Fig. 12A).

The product by process limitations in these claims (e.g., "polished") are directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessman*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final structure of the product "gleaned" from the process limitations or steps, which must be determined in a "product by process" claim, and not the patentability of the process limitations. Moreover, an old or obvious product produced

Art Unit: 2627

by a new method is not a patentable product, whether claimed in “product by process” claims or not. Note that the applicant has the burden of proof in such cases, as the above case law makes clear.

As recited in claim 10, Sasaki '954 shows that the conductive section 27 is part of a coil that includes a plurality of conductive sections that are disposed between (see location of 27 in Fig. 12A) and electrically isolated from the first 9 and second 29 pole layers, and an inorganic nonmagnetic insulating material (see col. 20, lines 3-5, “insulating layers formed between the thin-film coils forming the coils ... may be all made of inorganic layers”) is disposed between the conductive sections.

As recited in claims 11 and 24, Sasaki '954 teaches that magnetic pole portions nearest the medium facing surface are made of a high magnetic saturation material (“if at least the pole portion 16A is made of a high saturation flux density material, a magnetic flux effectively reaches the pole portion 16A without saturating before reaching there”, see col. 11, lines 50-53), and shows that the pedestal 22 is the portion nearest the medium facing surface (see Fig. 12A).

8. Claims 1-2, 5, 10, 15, 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki '543 (US Pat. No. 6459543 B1).

As recited in claim 1, Sasaki '543 shows a magnetic head (see Fig. 15, for example) for writing information on a relatively-moving medium, the head having a leading (lower in Fig. 15) end, a trailing (upper) end and a medium-facing (left) surface 30, the head comprising: a first soft magnetic pole layer 8 disposed in the head adjacent to the medium-facing surface 30 and extending substantially perpendicular to the medium-facing surface 30; a second soft magnetic pole layer 11c disposed closer than the first pole layer to the trailing end, the second pole layer

Art Unit: 2627

magnetically coupled to the first pole layer in a backgap region (see 11b) that is removed from the medium-facing surface; a soft magnetic pedestal 11a adjoining the second pole layer, the pedestal 11a disposed closer (leftward) than the second pole layer 11c to the medium-facing surface 30 and extending (rightward) less than the second pole layer 11c extends from the medium-facing surface 30, the pedestal 11a separated from the first pole layer 8 by a nonferromagnetic gap 10; and a conductive section 13a that is disposed between and electrically isolated from the first 8 and second 11c pole layers.

Sasaki '543, however, remains silent as to the specific relationships set forth in claim 1.

It is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization/ experimentation and thereby obtain various optimized relationships including those set forth in claim 1.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the magnetic head of Sasaki '543 satisfy the relationships set forth in claim 1. The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the magnetic head of Sasaki '543 satisfy the relationships set forth in claim 1 since it is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization /experimentation and thereby obtain various optimized relationships including those set forth in claim 1. Moreover, absent a showing of criticality (i.e., unobvious or unexpected results), the relationships set forth in claim 1 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

As recited in claims 2 and 15, Sasaki '543 shows that the conductive section 13a is part of a coil 13 that substantially encircles the second pole layer 11c.

As recited in claims 5 and 18, Sasaki '543 does not explicitly show that the conductive section is part of a coil that includes less than seven conductive sections disposed between and electrically isolated from the first and second pole layers; however, Sasaki '543 explicitly disclose the desirability of reducing a number of coil turns (see col. 5, lines 42, "it is possible that the number of turns of the coil is smaller than that of a flat-whorl-shaped coil. The yoke length is thereby reduced").

There is no invention in changing the number of parts of a known apparatus. *Iron Grip Barbell Co. v. USA Sports Inc.*, 73 USPQ2d 1225 (CAFC 2004).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrive at the claimed number of conductive sections in the course of routine experimentation and optimization. The rationale is as follows: one of ordinary skill in the art would have been motivated to arrive at the claimed number of conductive sections in order to achieve a desired inductance, magnetic flux and head size, and to improve high frequency operation as is notoriously well known in the art.

As recited in claims 10 and 23, Sasaki '543 shows that the conductive section is part of a coil that includes a plurality of conductive sections 13a that are disposed between and electrically isolated from the first 8 and second 11c pole layers, and an inorganic nonmagnetic insulating material (alumina, 14) is disposed between the conductive sections.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris, III et al (US PAP No. 20030179497 A1).

As recited in claim 14, Harris, III et al show a magnetic head (see Fig. 8) for writing information on a relatively-moving medium, the head having a leading (lower in Fig. 8) end, a trailing end and a medium-facing (right) surface, the head comprising: a first soft magnetic pole layer 80 disposed in the head adjacent to the medium-facing surface and extending substantially perpendicular to the medium-facing surface; a second soft magnetic pole layer 154 disposed closer than the first pole layer to the trailing end, the second pole layer magnetically coupled to the first pole layer in a backgap region (left region in Fig. 8) that is removed from the medium-facing (right) surface; a first soft magnetic pedestal 152 adjoining the first pole layer 80, the first pedestal 152 including a region that extends less than the first pole layer 80 extends (leftward) from the medium-facing surface; a second soft magnetic pedestal 78 adjoining the second pole

Art Unit: 2627

layer 154, the second pedestal 78 disposed closer than the second pole layer to the medium-facing (right) surface and extending less than the second pole layer extends (leftward) from the medium-facing surface, the second pedestal separated from the first pedestal by a nanoscale ($100 \text{ \AA} = 10 \text{ nm}$, which the Examiner interprets as “nanoscale”) nonferromagnetic gap 86; and a conductive section that is disposed between and electrically isolated from the first and second pole layers.

Harris, III et al are silent regarding the specific dimensional relationships set forth in claim 14.

It is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization/ experimentation and thereby obtain various optimized relationships including those set forth in claim 14.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the magnetic head of Harris, III et al satisfy the relationships set forth in claim 14. The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the magnetic head of Harris, III et al satisfy the relationships set forth in claim 14 since it is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization /experimentation and thereby obtain various optimized relationships including those set forth in claim 14. Moreover, absent a showing of criticality (i.e., unobvious or unexpected results), the relationships set forth in claim 14 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

10. Claims 25-26, 28 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacDonald et al (US PAP No. 20050180048 A1).

As recited in claim 25, MacDonald et al show a magnetic head (see Fig. 11) for writing information on a relatively-moving medium, the head having a leading end (lower in Fig. 11), a trailing (upper) end and a medium-facing surface (left), the head comprising: a first soft magnetic pole layer P1 disposed in the head adjacent to the medium-facing surface and terminating adjacent to the medium-facing (left) surface in a return pole tip; a second soft magnetic pole layer P3 disposed closer than the first pole layer to the trailing end, the second pole layer magnetically coupled to the first pole layer in a backgap region (see right part of P2) that is removed from the medium-facing surface; a soft magnetic pedestal (left part of P2) adjoining the second pole layer P3, the pedestal (left part of P2) disposed closer than the second

Art Unit: 2627

pole layer P3 to the medium-facing (left) surface and extending less than the second pole layer P3 extends (rightward) from the medium-facing surface, the pedestal (left part of P2) terminating adjacent to the medium-facing surface in a write pole, and a conductive section C that is disposed between and electrically isolated from the first and second pole layers.

Harris, III et al are silent regarding the specific dimensional relationships set forth in claims 25 and 35.

It is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization/ experimentation and thereby obtain various optimized relationships including those set forth in claims 25 and 35.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the magnetic head of MacDonald et al satisfy the relationships set forth in claims 25 and 35. The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the magnetic head of MacDonald et al satisfy the relationships set forth in claims 25 and 35 since it is notoriously old and well known in the magnetic head art to routinely modify a magnetic head structure in the course of routine optimization /experimentation and thereby obtain various optimized relationships including those set forth in claims 25 and 35. Moreover, absent a showing of criticality (i.e., unobvious or unexpected results), the relationships set forth in claims 25 and 35 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

As recited in claim 26, MacDonald et al show that the conductive section C is part of a coil (see location of coil 856 in Fig. 8) that substantially encircles the second pole layer P3.

As recited in claim 28, MacDonald et al show that the conductive section C is part of a coil that includes less than seven (five, see Fig. 11) conductive sections disposed between and electrically isolated from the first P1 and second P3 pole layers.

Allowable Subject Matter

11. Claims 3, 8-9, 16, 19-22, 24, 27 and 29-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sasaki et al (US PAP No. 20040196590 A1) show a thin-film magnetic head (see shape of conductors in Fig. 18-19, for example)

Matono (US Pat. No. 6778354 B2) shows a magnetic head comprising a helical coil (see Fig. 17, for example).

Kudo et al (US PAP No. 20040037002 A1) show a perpendicular recording head comprising pedestal 16 on a trailing side (see especially Fig. 2).

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on Monday through Friday, 1PM to 10PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Julie Anne Watko, J.D.
Primary Examiner
Art Unit 2627

September 1, 2006
JAW

A handwritten signature in black ink, appearing to read 'JAW', is written over the printed name and title of the examiner.